R05-20-C-004

CITY OF
STERLING
ILLINOIS

NARRATIVE INFORMATION SHEET:
City of Sterling, Illinois

1. **Applicant Identification:**

   City of Sterling
   City Hall
   212 Third Avenue
   Sterling, Illinois 61081

2. **Funding Requested:**
   a. Grant Type: Single Site Cleanup
   b. Federal Funds Requested: $214,000
   c. Contamination: Hazardous Substances
      $214,000 Hazardous Substances

3. **Location:**
   a. City: Sterling
   b. County: Whiteside County
   c. State: Illinois

4. **Property Information:**
   Property Name: Former Lawrence Brothers Hardware Site
   Property Address: 2 First Avenue
   Sterling, Illinois 61081

5. **Contacts:**
   a. **Project Director:** Mr. Scott Shumard, City Manager
      212 Third Avenue, Sterling, Illinois 61081
      Phone: (815) 632-6621
      Email: sshumard@sterling-il.gov

   b. **Chief Executive:** Mr. Charles "Skip" Lee, Mayor
      212 Third Avenue, Sterling, Illinois 61081
      Phone: (815) 632-6621
      Email: slee@sterling-il.gov

6. **Population:** 14,948 (US Census, 2017 American Community Survey)

7. **Other Factors Checklist:**

Other Factors	**Page #**
Community population is 10,000 or less	**N/A**
The applicant is, or will assist a federally recognized Indian tribe or United States territory	**N/A**
The priority brownfield site(s) is impacted by mine-scarred land	**N/A**
Secured firm leveraging commitment ties directly to the project and will facilitate completion of the project/reuse; secured resource is identified in the Narrative and substantiated in the attached documentation.	**3,8,10**
The priority site(s) is adjacent to a body of water (i.e., the border of the priority site(s) is contiguous or partially contiguous to the body of water, or world be contiguous or partially contiguous with a body of water but for a street, road, or other public thoroughfare separating them).	**1,2,3,4**
The priority site(s) is in a federally designated flood plain	**3,5**
The reuse of the proposed cleanup site(s) will facilitate renewable energy from wind, solar, or geothermal energy; or will incorporate energy efficiency measures	**2,3,4**

8. **Letter from the State Environmental Authority:**
   Please find attached the Letter of Acknowledgement from the Illinois Environmental Protection Agency regarding Sterling's Cleanup Grant Application.

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

1021 NORTH GRAND AVENUE EAST, P.O. BOX 19276, SPRINGFIELD, ILLINOIS 62794-9276 · (217) 782-3397

JB PRITZKER, GOVERNOR JOHN J. KIM, DIRECTOR

217/524-2084

November 27, 2019

City of Sterling
Attn: Scott Shumard
City Manager

Dear Mr. Shumard,

The Illinois Environmental Protection Agency (Illinois EPA) has received your request for a letter of acknowledgement for an upcoming Brownfields Cleanup Grant application to U.S. EPA. The City of Sterling is applying for a $214,000 Cleanup Grant for Hazardous Substances.

Illinois EPA acknowledges the City of Sterling's efforts to obtain federal Brownfields funds for this project. If you have any questions, I may be contacted at the above address or telephone number, or at Jenessa.N.Conner@illinois.gov.

Sincerely,

Jenessa Conner

Jenessa Conner, Project Manager
Voluntary Site Remediation Unit
Remedial Project Management Section
Division of Remediation Management
Bureau of Land

1. PROJECT AREA DESCRIPTION & PLANS FOR REVITALIZATION:

a. Target Area and Brownfields

a.i. Background and Description of Target Area

The City of Sterling is a small community situated along the Rock River in northwest Illinois. The City has long been associated with the manufacturing (cabinetry hardware and steel) and was once known as "The Hardware Capitol of the World". Sterling was the home to Northwestern Steel and Wire, R. B. and W. Bolt and Nut Company, Lawrence Brothers, National Manufacturing Company, Frantz Manufacturing Company, Charter Wire Products Company, and the Wilburt Vault Company. The hardware manufacturing industry, which served as the City's primary economic driver for decades, started to fail and has nearly disappeared altogether. Starting in the 1980's, the Sterling region lost 11% of all manufacturing jobs in the area, and that trend unfortunately continued. This sharp economic downturn brought the City of Sterling and surrounding region significant state and national attention as the unemployment rate in the area rose up to nearly 20% in 2010, which was double the rates of the state and nation at the time. Even today, when the State of Illinois is experiencing a historically low unemployment rate of 3.9%[1], the City of Sterling has a rate of nearly double that 7%, with 14% of individuals living below the poverty line[2].

With the manufacturing businesses, such as Northwestern Steel, National Lock and Lawrence Hardware, closing their doors, the City of Sterling has an abundance of abandoned, vacant, and potentially contaminated properties located along their riverfront, which is the target area of this application. The former Lawrence Brothers Hardware site, which is the subject of this Cleanup Grant, is one of those vacant facilities located along the downtown riverfront. Including the former Lawrence Brothers site, there are fourteen (14) other brownfield sites located along the riverfront. While residential neighborhoods are not immediately adjacent to the riverfront, the closest neighborhoods are comprised of the most sensitive populations, specifically minorities and low-income residents. The riverfront target area that includes the Lawrence Brothers site is comprised of a 31% minority population, a 67% LMI population[3]. Children under the age of 5 and people over the age of 65 make up a significant portion of the population, combining for approximately 51% of total people in the targeted area.[4]

The Rock River, while an important feature in defining the character of the City, is not a celebrated or well-used feature of the community. Despite having several handsome, historic buildings and bridges, much of the riverfront has a raw, unkept appearance due to the City's industrial history, and is lined by declining and defunct industrial facilities. Debris has collected along the riverbanks and large areas of the riverfront are privately controlled, meaning they are typically fenced off and inaccessible to the public. The Rock River riverfront, with all of its revitalization potential for the community, lacks a sense of entry or arrival, and a large span of land along the river remains tragically underutilized. Moreover, the lack of public space along the Rock River downplays one of the City's most remarkable natural resources.

a.ii. Description of the Brownfield Site

The subject of this Cleanup Grant proposal is the former Lawrence Brothers Hardware site, and specifically Building 3. As you cross the Illinois State Route 40 Bridge into Sterling, the first thing you see off to the east is a multi-story factory complex positioned at the water's edge that stretches for 3 football fields along the Rock River. This is the Lawrence Brothers site. Broken windows, peeling paint, cracks, spalled concrete revealing rebar, and small trees growing from the site's rooftops greet visitors and citizens alike to Sterling. The community has become increasingly vocal that something needs to happen with Lawrence Brothers Hardware; what was once a pillar of steady employment for the community, is now a major eyesore that is hindering vital riverfront redevelopment for the City as a whole.

[1] October 2019, Illinois Department of Employment Security https://www2.illinois.gov/ides/Pages/default.aspx
[2] US Census, 2017 ACS Census Data https://factfinder.census.gov/
[3] HUD GIS Mapping for LMI http://hud.maps.arcgis.com/apps/Viewer/index.html?appid=9642c475e56f49efb6e62f2d8a846a78
[4] US Census, 2017 ACS data

The former Lawrence Brothers Hardware site is located on the north side of the Rock River in downtown Sterling, Illinois, and has been vacant since hardware manufacturing operations were discontinued in 2006. The City of Sterling took ownership of the former Lawrence Brothers property via abandonment procedures in 2011. The former Lawrence Brothers complex is absolutely massive in size, consisting of approximately 238,440 square feet and sitting on 2.9 acres directly on the Rock River. From west to east, there are five buildings, all attached to each other. There is a three-story building on the eastern end of the site, and that three-story building is the subject of this cleanup grant, based on the outcomes of a Phase II Environmental Site Assessment of the entire complex.

The subject site is comprised of an approximately 0.37-acre portion of the former Lawrence Brothers Hardware facility, consisting of a three (3)-story, vacant industrial structure with a footprint covering approximately 16,000 square feet. The subject site is located on the east side of First Avenue (Illinois Route 40) in downtown Sterling, Illinois, along the Rock River. The Property is adjoined to the north by Union Pacific Railroad right-of-way followed by commercial development; to the east and west by remaining portions of the Lawrence Brothers Hardware facility; and to the south by the Rock River. Due to the historic use of the property, there are suspected contamination impacts to the soil, groundwater and the building itself. Asbestos and lead based paint are also of concern. Metal plating and various forms of metal finishing occurred throughout the complex over time. Huge machines still sit inside the building, as they did when the facility was operational. With the building being located on the Rock River riverbank, we are particularly concerned about the contaminant impact to soil, groundwater, and river water.

The proposed cleanup project will take place at one (1) of the five (5) interconnected buildings comprising the former Lawrence Brothers Hardware facility. Excluding the boiler house structure, the proposed cleanup project activities will be conducted in Building 3 that is the easternmost structure in the facility. A Phase II Environmental Site Assessment conducted on the Property on behalf of the City of Sterling in April 2019 tested for VOCs, SVOCs, PCBs, and RCRA metals. The assessment identified polynuclear aromatic hydrocarbons (PNAs) and select Resource Conservation and Recovery Act (RCRA) metals in soil and groundwater at concentrations exceeding the applicable Tier 1 remediation objectives (ROs) established in 35 Ill. Adm. Code Part 742, Tiered Approach to Corrective Action Objectives (TACO). In addition, cadmium was identified on one area at hazardous levels that require cleanup. Furthermore, an asbestos inspection identified asbestos-containing building materials (ACBMs) in the Property building that will require abatement.

b. Revitalization of the Target Area

b.i. Reuse Strategy and Alignment with the Revitalization Plans

As the City of Sterling faces a challenging economic climate and an underutilized, blighted downtown/riverfront area, it has identified the redevelopment of the Lawrence Brothers Hardware site along the Rock River as a key component to its economic recovery and growth. The City of Sterling is using its Strategic Plan, Downtown Riverfront Redevelopment Plan, and the Adaptive Reuse Study to guide its Brownfield redevelopment approach. To ensure that this project moves forward, the City of Sterling has completed Phase II Environmental Site Assessment activities using local funds. This work provided critical information on the location of environmental impacts, the media that is impacted, and the contaminations of concern that exist. The requested cleanup grant funds will provide for the remediation of one of the five buildings that comprise the former Lawrence Brothers site.

In 2011, the City of Sterling commissioned a planning firm to develop an Adaptive Reuse Plan for the Lawrence Brothers Hardware site. The Adaptive Reuse Plan consists of a concept for reuse of the site without extensive demolition, which is a more eco-friendly and sustainable approach. By reusing the existing buildings, the project can utilize the water and sewer infrastructure that leads to the site, along with roadway access from Illinois Route 40. The initial plans for reuse would be mixed-use, including office space, a boutique hotel, banquet facilities, restaurant, residential lofts and the conversion of a portion of the building for a parking deck. A River Walk is another reuse option for the site. The Sterling community has expressed a desire for a publicly accessible riverfront that is highlighted by gathering places and recreational opportunities. Incorporating

additional parks and open space can help reinforce the distinctiveness of the area and attract outside visitors. Recently an adaptive reuse developer, Gorman & Company (gormanusa.com) has toured the complex and expressed strong interest in redeveloping the entire complex in a similar fashion to what the City has envisioned for years.

This site is located in a federally designated floodplain. However, the way the building is situated at the river's edge and based on its design, it does not need to be flood-proofed. Water does not enter building. The windowsills act as a flood wall, and the building is protected. Fill will not be required or allowed for the planned redevelopment of the building, but the floodplain designation for the site has been a factor in reuse plans.

b.ii. Outcomes and Benefits of Reuse Strategy

As part of Sterling's Downtown Riverfront Redevelopment Plan and the Adaptive Reuse Plan for the former Lawrence Brothers site, the City of Sterling developed a community-approved redevelopment vision for the riverfront. With the completion of the Phase II site assessment, the environmental condition of the site is now better understood for the very first time, which has allowed for conversations and site visits with Gorman & Company, a nationally known redevelopment firm to occur. Gorman & Company has strong interest in the site. Without the pursuit of cleanup funding, the developer would not be interested in the site. The initial plans for reuse would combine mixed-use development, including office space, a boutique hotel, banquet facilities, restaurant, residential lofts, parking deck, and potential river walk. This redevelopment strategy for the former Lawrence Brothers site that will help eliminate public health concerns, and most importantly, redevelop the property into a productive end use, allowing the City to provide more jobs and recreational opportunities for their residents.

Redeveloped properties improve property values, provide more housing options, and expand the tax base. The primary economic benefit of redeveloping this site through this program will be the resulting job creation and expansion of the City's tax base. The Estimated Assessed Value (EAV) of the Lawrence Brothers Hardware site at the time of its closure was $38,093. The estimated EAV of the site after it's fully redeveloped is estimated to be in the tens of millions. While Sterling does not have an opportunity zone site, the City of Rock Falls, Illinois does, and it is located directly across the river from the Lawrence Brothers site. The proposed project will help spur economic growth within Rock Falls' Opportunity Zone. With the planned end use being a mixed use facility, the infusion of jobs due to the redevelopment of site will be very positive. The redevelopment would also support local businesses by providing amenities to their traveling employees and local employees, that do not currently exist. The City of Sterling anticipates that this project will then encourage and inspire hope to return to the economy of Sterling.

c. Strategy for Leveraging Resources

c.i. Resources Needed for Site Reuse

The City of Sterling has been extremely successful in leveraging other funding resources to complete brownfield assessment, remediation, and redevelopment activities in the City. Sterling has leveraged over $1,000,000 in funding for assessments, investigations, and cleanups since receiving their first grant in 2003, which primarily focused on the truly massive former Northwestern Steel & Wire plant. Sterling plans to pursue TIF funds, Enterprise Zone incentives, local Revolving Loan Funds, State and Federal Historical Tax Credits, New Market Tax Credits, Foreign Trade Zone funding, CDBG public infrastructure funds, Department of Transportation road and streetscaping funds, IDNR park and trail funds, and private investment dollars as components of the total financial redevelopment package. The City of Sterling will be providing a 20% cost share for this project, and have included a copy of Resolution #R2019-11-28 in the proposal attachments, committing their cost share.

c.ii. Use of Existing Infrastructure

This cleanup grant will funnel investment to a site that is served by existing infrastructure, thereby minimizing consumption of local resources and reducing sprawl of a "Greenfield" site. One of the key goals of Sterling's Brownfields Program, as found in the Downtown Riverfront Redevelopment Plan and the Adaptive Reuse Plan, is to make the City as a whole more sustainable by capitalizing on the advantages of reusing existing infrastructure. A comprehensive use of best

management practices within the riverfront will result in community benefits of environmental quality and appropriate site character. The City of Sterling intends to work with developers of the site to follow Leadership for Energy and Environmental Design (LEED) principals for the redevelopment of the former Lawrence Brothers site. A specific example is the re-use of the on-site production well for ground-thermal heating and cooling which can reduce costs by up to 30%. Incorporating the key principles of "smart growth" into the development decisions of the City's Brownfields Program will help foster the type of forward thinking and progressive leadership the City's communities need to help assess and revitalize Brownfields. In addition, by adaptively reusing existing buildings over new construction, the project will both preserve historic architectural treasures in the community and reduces construction waste and demolition disposal.

2. COMMUNITY NEED & COMMUNITY ENGAGEMENT:

a. Community Need

a.i. The Community's Need for Funding

The depressing economic and financial effect that brownfield sites have on the City of Sterling is most clearly illustrated by the economic statistics generated by the 2017 American Community Survey US Census Data. Sterling is plagued with a city-wide poverty rate of 14%, and the affected neighborhood directly surrounding the former Lawrence Brothers site shows an equally jarring 13.4% poverty rate. As would be expected, Sterling's per capita and median household incomes are a mere fraction of the National, State, and County averages. The City's Median Household Income is $43,171, compared to the State at $61,229 and the US at $57,652. Sterling's Per Capita Income is $19,432, while the State is $34,196 and the US is $59,531. The City of Sterling has one of the lowest Per Capita Incomes in the State of Illinois.[5] This income disparity is more heartbreakingly true for the affected neighborhoods closest to the former Lawrence Brothers site.

To see the planned reuse of the former Lawrence Brothers site realized, private investment will be a necessity, and in order to attract investment for the end-use of the property, the full environmental condition must be understood. The economic impact of brownfields on the City of Sterling is pervasive and adversely affects employment, investment, and property values in the City. The significant decline in manufacturing throughout the area is heavily felt in the City of Sterling. Recent examples include the closure of the Northwestern Steel and Wire facility, resulting in the loss of 1,400 jobs, as well as the closure of the General Electric Plant and the Tyco-Penberthy facility, resulting in the loss of nearly more 200 jobs. This job loss is traumatic for Sterling. Poverty and unemployment rates in Sterling and the affected neighborhood specifically, are markedly higher than the national and state averages and are much slower to recover. The City needs to create conditions that encourage local entrepreneurs and small business owners to establish and grow in the region. The City of Sterling's Brownfield Program can help with this issue by providing the catalytic funding for the remediation of the former Lawrence Brothers site. Without the assistance that this grant funding request would provide, it will be impossible to safely and successfully renovate the former Lawrence Brothers site into a healthy, beautiful community asset as illustrated in the Adaptive Reuse Plan for the site.

a.ii. Threats to Sensitive Populations

a.ii. (1) Health or Welfare of Sensitive Populations

The City of Sterling is home to many sensitive populations, including children, senior citizens over the age of 65, minorities, and women of child-bearing age. 27.7% of Sterling's population is composed of children under the age of 18 years old. Women of child-bearing age make up 31.2% of the City's population, and 20.7% of the population is made up of senior citizens over the age of 65. Additionally, the City of Sterling has a significant, growing Hispanic population, accounting for 25.3% of the City's population. In the affected neighborhood directly adjacent to the Lawrence Brothers site, children under the age of 5 and people over the age of 65 make up a significant portion of the population, combining for approximately 51% of total people in the targeted area.[6] There is also a YMCA pre-school located four blocks from the project site.

a.ii. (2) Greater than Normal Incidence of Disease and Adverse Health Conditions

[5] US Census, 2017 ACS data
[6] US Census, 2017 ACS data

The riverfront target area has a 25% higher cancer risk than other areas of the City. In addition, in comparison to the State of Illinois, the affected neighborhood in Sterling is in the 86th percentile for traffic related diesel particles in the air (due to the major roads and heavy truck traffic), and in the 71st percentile for lead paint indications, due to the percentage of housing stock built before 1960. [7] While the City keeps the Lawrence Brother site locked and secure, trespassing and vandalism still happens; this exposes the trespassers directly to serious adverse health situations from the contamination of the various hazardous substances present within the buildings and the Rock River to further potential contamination if trespassers dump anything from the buildings into the river. There have been two fires in the Lawrence Brothers' main building since the City took ownership in 2011. Both times local youths broke into the Lawrence Building and set fires. Not only was the fire a risk, but exposure to contaminants within the building are a continuing problem for City, as the building continually experiences trespassers. The site is also located in a federally designated floodplain.

a.ii. (3) Disproportionately Impacted Populations

By utilizing US EPA's online EJSCREEN[8] (environmental justice screening and mapping) program, we can evaluate public and environmental health issues to help identify any potential Environmental Justice areas in the community, specifically that of the neighborhood surrounding the former Lawrence Brothers site. For instance, EJSCREEN shows that the affected neighborhood directly surrounding the former Lawrence Brothers site has a 31% minority population total (25.3% of which are Hispanic), a poverty rate of 19.23%, and 67% of the neighborhood classified as low-income.

b. Community Engagement

b.i. Project Partners

b.ii. Project Partner Roles

Partner Name	Point of Contact (name, email, and phone)	Specific Role in the Project
Sauk Valley Area Chamber of Commerce	Kris Noble Phone: 815.625-2400; Email: knoble@saukvalleyareachamber.com	Marketing of project site and the City's other downtown vacant properties & redevelopment sites. Business attraction, expansion & retention; Entrepreneurial development & recruitment
Greater Sterling Development Corporation	Heather Sotelo Phone: 815-625-5255; Email: hsotelo@sterlingdevelopment.org	Marketing of project site and the City's other downtown vacant properties & redevelopment sites. Business attraction, expansion & retention; Entrepreneurial development & recruitment
Sterling Today, Inc.	Janna Groharing Phone: 815-626-8610; Email: janna@sterlingmainstreet.org	Marketing of reuse of riverfront properties
Economic Growth Corporation	Brian Hollenback Phone: 309-794-6711 Email: bhollenback@growthcorp.org	Marketing of reuse of riverfront properties
Sterling Kiwanis	Marie Rombouts Phone: 815-632-6629 Email: mrombouts@sterling-il.gov	Promote City's efforts in cleanup of brownfield sites; Obtain resident and property owner input on proposed acquisitions by City for redevelopment projects
Sterling Optimists	Joe Martin Phone: 815-626-6730; Email: Non-responsive	Promote City's efforts in cleanup of brownfield sites; Obtain resident and property owner input on proposed

[7] US EPA's EJSCREEN website is ejscreen.epa.gov/mapper
[8] US EPA's EJSCREEN website is ejscreen.epa.gov/mapper

		acquisitions by City for redevelopment projects

b.iii. Incorporating Community Input

The City of Sterling will include the affected neighborhood and their respective residents, property owners, and business owners as vital partners in their cleanup and reuse plans. Neighborhood organizations and citizen's groups will have the opportunity to express their concerns, identify their needs, and create and implement reuse plans. The City of Sterling has partnered with their Project Partner organizations to assist with community notification efforts. As Sterling moves forward with the cleanup, the City will hold three (3) public meetings and develop three (3) fact sheets on the status of Brownfield cleanup activities at important junctures. The City will post these fact sheets on our website and utilize any necessary social media to notify the public with a link to the City webpage. If the City is awarded this grant, they will continue with the utilization of diverse notification methods (i.e. social media, website, postings) to ensure that they reach a broad audience. It will also be a priority for Sterling to describe their activities, and progress in ways that are easily understood by its residents, who will most likely be unfamiliar with environmental and scientific terminology. There is a significant Hispanic population in Sterling, so the City will also need to translate all community notification efforts into Spanish. In addition, the City of Sterling will seek out translation services for any households directly impacted by any cleanup or remediation work.

3. TASK DESCRIPTIONS, COST ESTIMATES, AND MEASURING PROGRESS:

a. Proposed Cleanup Plan

The proposed cleanup plan is based on the Analysis of Brownfield Cleanup Alternatives (ABCA) prepared for this property, which is also included in this application package. The tasks and activities described below are eligible uses of funds and are specifically designed to be effectively completed within the three-year period of performance. The proposed cleanup plan is as follows:

- **Subsurface Contamination - In Situ Chemical Stabilization and Reliance on Existing Floor as Engineered Barrier:** Conduct pre-remedial design confirmation sampling to further refine the horizontal and vertical extent of cadmium in soil exceeding the toxicity characteristic threshold and collect volume of impacted soils for bench-scale treatability testing to specify product dosing. Based on the results, conduct in situ chemical stabilization via injections of a liquid reagent to reduce leachable cadmium and render non-hazardous. Following injection activities, complete further confirmation soil sampling to verify cadmium concentrations are below to the toxicity characteristic threshold. Rely on the existing building slab as an engineered barrier for the remaining soil impacts.

    - Effectiveness: This alternative is anticipated to be effective at stabilizing cadmium in soil such that the toxicity characteristic threshold is no longer exceeded. The engineered barrier effectively excludes soil ingestion and soil inhalation exposure routes.

    - Implementation: Specialized injection equipment may be required due to low-clearance ceilings; however, the building and existing slab could remain in place. Effectiveness must be demonstrated by confirmation sampling results and may require multiple injection events. The engineered barrier (building slab) is existing and would not require further action apart from patching after injection work and routine maintenance.

    - This cleanup plan is the most cost-effective approach for addressing the identified subsurface impacts and is anticipated to cause minimal disturbance to the land, river, and surrounding area. Given that the expected redevelopment includes renovation of the existing building, alternatives requiring building demolition (i.e. excavation) are not favorable for the overall project objectives. This plan is also compatible with intended land use and meets the cleanup objectives for the Property in accordance with TACO.

- **Asbestos Abatement:** Asbestos-Containing Building Material (ACBM) can be abated by a licensed asbestos abatement contractor. A licensed asbestos building inspector completed an inspection of the proposed property and identified ACBM in window caulk, pipe wrap, and roofing.

    - Effectiveness: this alternative removes ACBM from the structure and thereby eliminates potential exposure to asbestos. Abatement is the most effective method of addressing ACBM on the property. Abatement of ACBM is the only effective and implementable option to prevent potential asbestos exposure during and after redevelopment of the Property due to the condition of the ACBM, negating the option for encapsulation.

    - Implementation: abatement must follow National Emission Standards for Hazardous Air Pollution (NESHAP) and Illinois Department of Public Health (IDPH) requirements. The building is structurally sound, making asbestos abatement easily implemented.

b. Description of Tasks/Activities and Outputs

Task 1: Program Management
i. Project Implementation: This task includes oversight of the City's Cooperative Agreement with US EPA for this project. This will ensure compliance with the Agreement, Work Plan, Schedule, and EPA's regulations. This task also includes preparation/submittal of Quarterly and Annual Reports, MBE/WBE reporting, entering information in the Assessment, Cleanup, and Redevelopment Exchange System (ACRES) database for the project, procurement of a Qualified Environmental Consultant to lead the project, and City of Sterling staff attendance at a US EPA Brownfields Conference.
ii. Anticipated Schedule: This task will start immediately upon project award, and will take continue throughout the entire three-year project period.
iii. Task/Activity Lead: This task will be led by City Manager Scott Shumard.
iv. Outputs: 12 Quarterly Reports, 3 Annual Reports, 3 MBE/WBE Reports, and the attendance of City Staff at 2 US EPA Brownfields Conferences.

Task 2: Community Involvement
i. Project Implementation: This task includes cooperation between the City staff, Environmental Consultant, and Project Partners to orchestrate public meetings to inform residents, property owners, and the public about the status of the project. This task also includes website updates and printed public information materials as needed. Public comments, questions, and concerns will be addressed under this task as well.
ii. Anticipated Schedule: This task will commence immediately upon project award, and will continue throughout the entire three-year project period.
iii. Task/Activity Lead: This task will be led by City Manager Scott Shumard, with assistance from the City's selected Qualified Environmental Consultant and the City's Project Partners.
iv. Outputs: 3 Public Meetings, 3 Website Updates, 3 Fact Sheets

Task 3: Cleanup Planning
i. Project Implementation: Prior to site remediation work, the Environmental Consultant will prepare a site-specific work plan including the Health & Safety Plan, Quality Assurance Project Plan, finalize the ABCA, and coordinate with the City and development professionals to finalize the cleanup plan. The City will secure all necessary permits and prepare bid documents to select a competitive, qualification-based Cleanup Contractor in compliance with federal, state, and local procurement requirements.
ii. Anticipated Schedule: This task will be initiated immediately upon grant award, and will be completed in the first year of the project period.
iii. Task/Activity Lead: This task will be led by the City's Qualified Environmental Consultant.

iv. **Outputs:** Health & Safety Plan, Quality Assurance Project Plan, ABCA, Plans & Specs, Permits, and selection of Cleanup Contractor to perform remediation activities at the project site

Task 4: Cleanup Activities
i. **Project Implementation:** This task includes the remediation work described above, including: conduct in-situ chemical stabilization via injections of a liquid reagent to reduce leachable cadmium and render non-hazardous; following injection activities, complete further confirmation soil sampling to verify cadmium concentrations are below to the toxicity characteristic threshold; rely on the existing building slab as an engineered barrier for the remaining soil impacts; and asbestos abatement at the project site.
ii. **Anticipated Schedule:** This task will commence after the first year in the project period, and will continue throughout the remainder of the project period.
iii. **Task/Activity Lead:** This task will be led by the City's Qualified Environmental Consultant.
iv. **Outputs:** 0.37 acres of land remediated, Reuse and Development Plans for site

c. Cost Estimates
Hazardous Substances Cleanup Grant Budget

Budget Categories		Project Tasks				
		Task 1: Program Management	**Task 2: Community Involvement**	**Task 3: Cleanup Planning**	**Task 4: Cleanup Activities**	**TOTAL**
Direct Costs	**Personnel**	**$4,000**	**$2,000**			**$6,000**
	Fringe Benefits					
	Travel					
	Equipment					
	Supplies					
	Contractual	**$4,000**	**$4,000**	**$20,000**	**$180,000**	**$208,000**
	Other					
Total Direct Costs		**$8,000**	**$6,000**	**$20,000**	**$180,000**	**$214,000**
Total Federal Funding		**$8,000**	**$6,000**	**$20,000**	**$180,000**	**$214,000**
Cost Share		**$1,300**	**$1,500**	**$4,000**	**$36,000**	**$42,800**
Total Budget		**$9,300**	**$7,500**	**$24,000**	**$216,000**	**$256,800**

c.i. Development of Cost Estimates

Task 1: Program Management: the Program Management Budget includes $4,000 of City personnel time, and at ~$60/hour, this will provide approximately 50 hours of City staff time for all reporting and cooperative agreement management activities. In addition, the Cost Share will provide another 21 hours ($60/hour x 21 hours = $1,300 cost share) of staff time to apply towards reporting efforts. The $4,000 for contractual work is for 32 hours of Environmental Consultant assistance ($125/hour x 32 hours = $4,000). The remainder of the budget is for City Staff to attend National Brownfield Conferences.

Task 2: Community Involvement: the Community Involvement budget includes $2,000 of City personnel time, and at ~$60/hour, this will provide approximately 25 hours of City staff time for the development of Fact Sheets, Website updates, and conducting Public Meetings. The $1500 cost share under this task will go towards supplies for printing, meetings, fact sheets, and website updates. The $4,000 for contractual work is for 32 hours of Environmental Consultant assistance ($125/hour x 32 hours = $4,000).

Task 3: Cleanup Planning: the $20,000 Contractual Budget will be for the development of the HASP, QAPP, finalization of the ABCA, Plans & Specs and permitting for the project, and assistance with bidding. At $125/hour, this will provide 160 hours of consultant time for this task. The City's $4,000 cost share for this task will go towards bidding fees, providing plans & specs, and time spent selecting the qualified environmental contractor to complete the remediation work.

Task 4: Cleanup Activities: the $180,000 Contractual Budget and $36,000 Cost Share budget for Cleanup Activities was developed directly from the draft ABCA for this project, which is attached to this proposal. These costs are directly related to the estimates provided in the draft ABCA.

c.ii. Application of Cost Estimates

The cost estimates and breakdowns provided above were developed by the City, based on their previous US EPA Brownfields funding and understanding the costs associated with the work, as well as from the draft ABCA prepared for the project site. The City's previous brownfields knowledge helps to position them to effectively and efficiently accomplish the goals of their assessment project.

c.iii. Eligibility of Cost Share Activities

The City of Sterling is providing a 20% cost share for the proposed project, which is being applied to each eligible project task.

d. Measuring Environmental Results

The City of Sterling will track, measure, and report project performance through its annual reports, quarterly reports, ACRES reporting, and on the City's website. Tracking and measuring progress throughout the period of performance will ensure the Sterling achieves the intended project results. Quarterly and Annual Reports will cover work progress and current status, any difficulties encountered, a record of financial expenditures, data results, and anticipated further action. Specific accomplishments, contaminants found, which materials were impacted, and resources required to leverage and complete the planned reuse will all be reported on. This site will be entered into the ACRES database, which will also be utilized to track job creation and acres of land assessed as part of this grant project. The table below summarizes the proposed project outcomes, which the City will track and report to EPA on throughout the project.

Task	Measuring Environmental Results
Task 1: Program Management	**Outcomes:** Accountability for use of public funds and confirmation that the site meets regulatory cleanup standards **Tracking Method:** Set deadlines for deliverables, provide copy of deliverables to US EPA
Task 2: Community Involvement	**Outcomes:** Informed, Engaged Community **Tracking Method:** Recording and Reporting Community Outreach elements (fact sheets, sign-in sheets, and updates to City website for project)
Task 3: Cleanup Planning	**Outcomes:** Well-defined project that meets all EPA and IEPA regulatory standards for remediation and enables accurate bidding by prospective contractors **Tracking Method:** Set dates for deliverables, provide EPA with schedule of deliverables
Task 4: Cleanup Activities	**Outcomes:** Reduction of threats to the Health and Safety of the City's residents, Redevelopment of Property **Tracking Method:** Construction Schedule, Updates to Construction Schedule, Weight measurements for soil removed, and samples to evaluate achievement of cleanup standards

4. PROGRAMMATIC CAPABILITY AND PAST PERFORMANCE:

a. Programmatic Capability

a.i. Organizational Structure

Sterling has the ability and capacity to manage this grant. If awarded this funding, Sterling will effectively manage the grant and successfully perform each phase of work on the project. City Manager Scott Shumard will serve as the City's Project Manager for this project, serving as the City's primary contact and responsible for submitting quarterly reports, financial reports, progress reports, and the final summary report to EPA Region 5 Staff with the assistance of the City's environmental consultant. The City has extensive experience facilitating and managing redevelopment projects and will utilize that experience to support the most strategic use of the grant funds. Upon award of the cooperative agreement, City staff will prepare a draft Work Plan. After the US EPA approves the work plan, the City will retain the QEP in compliance with all applicable federal and local procurement requirements. The QEP will assist with grant and program management and will conduct cleanup planning, cleanup activities and participate in project reporting and community engagement activities. The City will work with IEPA to provide independent oversight of cleanup activities conducted under this program, to ensure all assessment is conducted appropriately and with consideration for public health and welfare.

a.ii. Description of Key Staff
Mr. Scott Shumard, City Manager, is now serving in his 14th year with Sterling and is very committed to the City's brownfields program. As the City Manager, he oversees a division charged with administering the planning, sustainability, neighborhood program, neighborhood and building inspection functions of the City, and with managing economic and urban development efforts. As the City Manager, he is part of an executive team that manages the day-to-day operations for a municipal government of more than 15,000 residents with an annual budget of approximately $10 million. Other key staff will include Mayor Charles Lee and Director of Finance Cindy Von Holten. The Mayor will assist Shumard with Community Involvement and Reuse efforts. The Director of Finance will be responsible for receiving, tracking, and payment on all financial aspects of the grant project. The City will procure a brownfields consultant that has a proven track record with programmatic reporting with EPA Brownfields grants. The City will adhere to their work plan, schedule, and all terms and conditions required by US EPA. The selected environmental consultant will work closely with IEPA and the assigned US EPA Grant Manager to oversee and approve remediation activities. Sterling will follow all federal procurement procedures when hiring a brownfields consultant and remediation contractor.

a.iii. Acquiring Additional Resources
The City of Sterling will identify, coordinate and leverage any public and private resources needed to complete the described grant tasks. The City will follow EPA's procurement policies to hire a Qualified Environmental Consultant (QEC) to effectively and efficiently manage the City's assessment grant project. Project Partners will assist in providing supplies for community outreach activities, and the City will provide a 20% cost-share for the project to assist with whatever is needed for each project task to ensure the successful remediation and redevelopment of this property.

b. Past Performance and Accomplishments
b.i. Currently Has or Previously Received an EPA Brownfields Grant
b.ii.(1) Purpose and Accomplishments
Sterling has received three previous US EPA Brownfields Assessment Grants. In 2003, Sterling was selected to receive assessment and revolving loan fund grants. At that time, the City was focusing on the 700-acre Rock River Redevelopment Area or the Northwestern Steel & Wire site, which is part of a designated Illinois Enterprise Zone. The City received $400,000 in assessment grant funds, and $800,000 in Revolving Loan Funds. In 2006, Sterling received assessment and cleanup funds, obtaining $257,000 in assessment funds and $189,000 in petroleum cleanup funds for the Stormwater Retention Area within the former Northwestern Steel & Wire property. Assessment and remediation activities at the sites have now been completed. To date, all the City's previous grant funding was allocated to the Rock River Redevelopment Area/Northwestern Steel & Wire site. Comprised of 700 acres, all the City's previous grant resources were exhausted at this specific site due its sheer size. Approximately 250 acres of the property is back in use, hosting Sterling Steel Co., Rock River Lumber & Grain, Sterling Rail Services, and a freight car repair shop. Together, these businesses employ over 200 people. By putting these sites back into reuse and pursuing additional USEPA Brownfields grant funding, the City is moving forward with the plans that have been laid out for their Downtown Riverfront Redevelopment Plan. Most recently, we recorded a No Further Remediation (NFR) letter for three (3) parcels for Plant 1 on July 31, 2017.

b.ii.(2) Compliance with Grant Requirements
Sterling has received three previous US EPA Brownfields Assessment Grants, so they are very aware of the programmatic requirements involved in successfully managing an EPA Brownfields grant. Sterling did have a period of difficulty with Quarterly Reporting during a time of transition, but that issue has been long resolved. The City will pay strict attention to the workplan and comply with the schedule, terms and conditions, and reporting requirements to include quarterly reports, federal financial reports, ACRES, DBE reports, and where appropriate, HASP and QAPP, and finalizing the Analysis of Brownfield Cleanup Alternative (ABCA) report. The City has a positive reputation with US EPA, ensuring to adhere to all requirements to protect the excellent reputation established with its federal partners

THRESHOLD CRITERIA:

1. Applicant Eligibility:
The City of Sterling is an incorporated municipality of the State of Illinois and has the authority to enter into a cooperative agreement for a Cleanup Grant with the United States Environmental Protection Agency.

2. Previously Awarded Cleanup Grants:
The proposed cleanup site has not received funding from a previously awarded EPA Brownfields Cleanup Grant.

3. Site Ownership:
The City of Sterling is the sole owner of the proposed cleanup grant site.

4. Basic Site Information:

(a) Site name: Former Lawrence Brothers Hardware Site
(b) Address: 2 First Avenue, Sterling, Illinois 61081
(c) Current Owner: City of Sterling, Illinois

5. Status & History of Contamination at the Site:

(a) Contamination: The facility was historically a hardware manufacturer that included metal finishing. The primary contaminants found during Phase II activities that required cleanup are cadmium in soils and asbestos containing building materials. Other site impacts will be addressed with institutional and engineering controls.

(b) Operational History & Current Use of Site: The facility operated as a hardware manufacturing plant from 1913 to 2006. The property has been vacant since 2006.

(c) Environmental Concerns: The original concern at this site was possible impacts from chlorinated solvents, metals, PCBs and asbestos. Cadmium and asbestos have been identified as of environmental concern for impacts to the Rock River and the air. .

(d) Source of Contamination and Nature and Extent of Contamination: Based on assessment work and the historic operations at the site we know that metal plating was conducted on the site. Cadmium has been found at high levels requiring cleanup on a portion on the site. Asbestos was found in floor tile, window glazing and pipe insulation that will require abatement prior to adaptive reuse of the building.

6. Brownfields Site Definition: The former Lawrence Brothers Hardware site meets the definition of a brownfield. This site is (a) Not listed or proposed for listing on the National Priorities List; (b) Not subject to unilateral administrative orders, court orders, administrative orders on consent, or judicial consent decrees issued to or entered into by parties under CERCLA; (c) Not subject to the jurisdiction, custody, or control of the U.S. Government.

7. Environmental Assessment Required for Cleanup Grant Applications:

A written ASTM E1903-11 or equivalent Phase II environmental site assessment report must be completed prior to application submission. A Phase II Environmental Site Assessment conducted on the Property on behalf of the City of Sterling in April 2019 identified polynuclear aromatic hydrocarbons (PNAs) and select Resource Conservation and Recovery Act (RCRA) metals in soil and groundwater at concentrations exceeding the applicable Tier 1 remediation objectives (ROs) established in 35 Ill. Adm. Code Part 742, Tiered Approach to Corrective Action Objectives (TACO). In addition, cadmium was identified at concentrations exceeding the toxicity characteristic threshold for hazardous waste under RCRA which requires cleanup under the Illinois Environmental Protection Agency (IEPA) voluntary cleanup program. . Furthermore, an asbestos inspection completed in November 2019 identified asbestos-containing building materials (ACBMs) in the Property building.

8. Enforcement or Other Actions: Lawrence Brothers is bankrupt and the City has completed an abandonment proceeding to gain control of the site. No known enforcement or other actions were identified.

9. Sites Requiring a Property-Specific Determination: The Former Lawrence Brothers Site does not require a property-specific determination based on review Section 1.5 in the Information on Sites Eligible for Brownfields Funding under CERCLA 104(k) of the FY20 Guidelines for Brownfield Cleanup Grants.

10. Threshold Criteria Related to CERCLA/Petroleum Liability:

a.) Property Ownership Eligibility – Hazardous Substances Sites

(1) Exemptions to CERCLA Liability - Property Acquired Under Certain Circumstances by Units of State and Local Government - CERCLA §101(20)(D) Liability : The City acquired this property through abandonment proceedings. The petition to declare the Lawrence Brothers property abandoned was filed in the circuit court in Whiteside County, Illinois on June 1, 2010. The defendants include LB Acquisition Company, LLC, Lawrence Hardware, LLC and a creditor and a tax buyer. Title to the property was LB Acquisition, LLC which acquired the property from Lawrence Brothers on July 2, 2001. Lawrence Brothers was bankrupt and was not party to the litigation. None of the defendants appeared or defended the petition. All were defaulted. On September 23, 2011, the court entered an order finding that the property was abandoned and on November 8, 2011, entered an order authorizing the court to sign a judicial deed vesting title in the property to the City of Sterling.

Information on Liability and Defenses/Protections:

a. **Information on the Property Acquisition**: The City acquired this property through abandonment proceedings. The petition to declare the Lawrence Brothers property abandoned was filed in the circuit court in Whiteside County, Illinois on June 1, 2010. The defendants include LB Acquisition Company, LLC, Lawrence Hardware, LLC and a creditor and a tax buyer. Title to the property was LB Acquisition, LLC which acquired the property from

Lawrence Brothers on July 2, 2001. Lawrence Brothers was bankrupt and was not party to the litigation. None of the defendants appeared or defended the petition. All were defaulted. On September 23, 2011, the court entered an order finding that the property was abandoned and on November 8, 2011, entered an order authorizing the court to sign a judicial deed vesting title in the property to the City of Sterling.

b. **Date on which the property was acquired:** The City of Sterling took ownership of the site via Abandonment proceedings on November 8, 2011.

c. **Contribution Toward Hazardous Substances Disposal**: All hazardous waste and otherwise was generated prior to the City acquiring the property. The City has not caused or contributed any release of hazardous substance at the site. The City has not arranged for any hazardous disposal or transported hazardous substances to the site.

d. **Affirm that you have you not caused or contributed to any release of hazardous substances at the site**: All hazardous waste and otherwise was generated prior to the City acquiring the property. The City has not caused or contributed any release of hazardous substance at the site. The City has not arranged for any hazardous disposal or transported hazardous substances to the site.

e. **Affirm that you have not, at any time, arranged for the disposal of hazardous substances at the site or transported hazardous substances to the site**: All hazardous waste and otherwise was generated prior to the City acquiring the property. The City has not caused or contributed any release of hazardous substance at the site. The City has not arranged for any hazardous disposal or transported hazardous substances to the site.

11. Cleanup Authority and Oversight Structure:

a. Describe how you will oversee the site:

The City of Sterling intends to enroll the Lawrence Brothers Hardware facility into the Illinois EPA voluntary Site Remediation Program (SRP) in pursuit of a No Further Remediation (NFR) letter relating to the identified subsurface impacts. Accordingly, the numerical cleanup objectives for subsurface contamination are the TACO remediation objectives for residential, industrial/commercial, and construction worker receptors. In addition, TACO regulations stipulate that soils remaining on site cannot contain RCRA metals exceeding the toxicity characteristic threshold. Therefore, soils exhibiting the characteristic of toxicity based on TCLP analysis must be remediated as a primary cleanup objective.

b. Provide your plan to acquire access to relevant adjacent or neighboring properties if necessary: This **is** not needed or applicable for this site, as the site would be stand-alone. The site has current access that is signaled from IL Route 2**.**

12. Community Notification:

a. Draft Analysis of Brownfield Cleanup Alternatives

A Draft Analysis of Brownfield Cleanup Alternatives (ABCA) was prepared for the project site. The City made it available to the public for review and comment on November 18, 2019. The ABCA and DRAFT Cleanup Grant Application were available for review at City Hall and on the City's website: http://ci.sterling.il.us/. The DRAFT ABCA is included in this grant submittal.

b. Community Notification Ad

The City of Sterling published a community notification ad in the local newspaper, the Daily Gazette, on November 14, 2019. This ad indicated the following:

- that a copy of the City's grant application, including the Draft ABCA, is available for public review and comment;
- how to comment on the draft application;
- where the draft application is located (with City Clerk and on the City's website); and
- the date and time of a public meeting (held November 18, 2019)

The Certificate of Publication from the local newspaper for the community notification ad is included in this grant submittal. In addition, we have included a screenshot of the City's website to illustrate the availability of the draft ABCA and application on the City's website.

c. Public Meeting

The City of Sterling held a Public Meeting on November 18, 2019 at 6:30pm to discuss the draft application and consider public comments on the application and project. From the Public Meeting, the City is including the following in their grant application submittal:

- the comments or a summary of the public comments received;
- the applicant's response to those comments;
- meeting notes or a summary of the public meeting; and
- meeting sign-in sheet

d. Submission of Community Notification Documents

The City of Sterling has included the items listed below in their grant application submittal to US EPA:

- a copy of the draft ABCA
- a copy of the ad that demonstrates notification to the public and solicitation for comments on the application
- the comments or a summary of comments received
- the applicant's response to those public comments
- meeting notes or summary from the public meeting
- meeting sign-in sheets

13. Statutory Cost Share

The City of Sterling will be providing a 20% cost share for the proposed project in the amount of $42,800. The City will be providing their cost share in the form of a monetary contribution. The City passed Resolution #R2019-11-28 to provide this 20% cost share at their November 18, 2019 City Council Meeting.

Analysis of Brownfield Cleanup Alternatives

Former Lawrence Brothers Hardware
2 First Avenue
Sterling, Illinois

November 2019

Brownfields Cleanup Grant

N/A

Table of Contents

Figures

1.0 INTRODUCTION

This Analysis of Brownfields Cleanup Alternatives (ABCA) has been prepared on behalf of the City of Sterling for a portion of the former Lawrence Brothers Hardware site, located at 2 First Avenue in Sterling, Illinois (the Property). A Site Location Map is included as Figure 1. This ABCA has been prepared in pursuit of a Brownfields Cleanup Grant to identify and evaluate cleanup alternatives to mitigate potential risks to human health and/or the environment resulting from subsurface contamination on the Property.

The former Lawrence Brothers Hardware site is located on the north side of the Rock River in downtown Sterling, Illinois, and has been vacant since hardware manufacturing operations were discontinued in 2006. The Property consists of one (1) of the five (5) interconnected buildings comprising the former Lawrence Brothers Hardware facility. Excluding the boiler house structure, the Property building is the easternmost structure in the facility. A Site Layout Map depicting the approximate Property boundary is included as Figure 2.

A Phase II Environmental Site Assessment conducted on the Property on behalf of the City of Sterling in April 2019 identified polynuclear aromatic hydrocarbons (PNAs) and select Resource Conservation and Recovery Act (RCRA) metals in soil and groundwater at concentrations exceeding the applicable Tier 1 remediation objectives (ROs) established in 35 Ill. Adm. Code Part 742, Tiered Approach to Corrective Action Objectives (TACO). In addition, cadmium was identified on one (1) soil boring at concentrations exceeding the toxicity characteristic threshold for hazardous waste under RCRA. Furthermore, an asbestos inspection completed in November 2019 identified asbestos-containing building materials (ACBMs) in the Property building.

The City of Sterling has identified the redevelopment of the Lawrence Brothers Hardware site along the Rock River as a key component to its economic recovery and growth. Based on the findings of the environmental investigations, redevelopment of the Property will include mitigation of ACBM and subsurface environmental impacts to protect human health and the environment. This ABCA is provided to outline the four (4) alternatives evaluated during the cleanup planning process for the Property.

2.0 BACKGROUND

2.1 Site Description

The Property is comprised of an approximately 0.37-acre portion of the approximately 3.5-acre former Lawrence Brothers Hardware facility. The Property consists of a three (3)-story, vacant industrial structure with a footprint covering approximately 16,000 square feet. The Property is located on the east side of First Avenue (Illinois Route 40) in downtown Sterling, Illinois, along the Rock River. The Property is adjoined to the north by Union Pacific Railroad right-of-way followed by commercial development; to the east and west by remaining portions of the Lawrence Brothers Hardware facility; and to the south by the Rock River.

A Site Location Map depicting the regional location of the Property is provided as Figure 1, and a Site Layout Map is included as Figure 2.

2.2 Site History

The Property was developed in 1938 as a portion of the adjoining Lawrence Brothers Hardware facility and was operated in conjunction with the remainder of the facility for manufacturing home and farm hardware such as hinges, barn door hangers, pulleys, door plates, locks, and various other metal products. The Property was left vacant following facility closure in 2006, and the City of Sterling acquired the Lawrence Brothers Hardware facility in 2010 on abandonment and with the intent of pursuing redevelopment.

2.3 Emergency Response Actions

The United States Environmental Protection Agency (US EPA) completed an emergency removal action at the Lawrence Brothers Hardware facility in May 2014. During response to a fire started in the building by vandals, the fire department and Illinois State Fire Marshal observed drums of hazardous waste and laboratory chemicals in the building. The Illinois Environmental Protection Agency (Illinois EPA) performed a site inspection in September 2013 and subsequently referred the facility to US EPA for removal action due to the threat of release of the hazardous materials stored in the building. Response actions were completed on May 1, 2014, to remove select hazardous materials to prevent potential exposure to human health or the environment.

3.0 CONTAMINANTS AND EXPOSURE ROUTES

Due to the long-term history of industrial operations at the Lawrence Brothers Hardware site, the City of Sterling initiated environmental assessment activities to determine the nature and extent of subsurface impacts, if present. Site characterization activities on the Property included a subsurface investigation and an asbestos-containing building materials inspection.

3.1 Subsurface Contamination

The subsurface investigation on the Property was completed as part of a larger Phase II Environmental Site Assessment (ESA) conducted for the entire Lawrence Brothers Hardware facility. Soil sample results indicate that select PNAs and metals are present in the subsurface on the Property at concentrations exceeding the applicable Tier 1 ROs, including the following constituents of concern (COC):

SVOCs:

- Benzo(a)anthracene
- Benzo(a)pyrene
- Benzo(b)fluoranthene
- Carbazole
- Dibenzo(a,h)anthracene
- Indeno(1,2,3-cd)pyrene

Inorganics:

- Arsenic
- Cadmium
- Chromium
- Lead
- Mercury

The listed COCs were identified in soil exceeding one or more of the following exposure routes: soil ingestion (residential, industrial/commercial, construction worker), soil inhalation (residential, industrial/commercial, construction worker), and soil component to groundwater ingestion.

Notably, two (2) soil samples collected from one (1) soil boring location exhibited concentrations of toxicity characteristic leaching procedure (TCLP) cadmium exceeding the RCRA toxicity characteristic threshold. In accordance with Illinois EPA TACO regulations, soils exhibiting the characteristic of toxicity require removal or remediation prior to Site closure.

3.2 Asbestos-Containing Building Materials

A licensed asbestos building inspector completed an inspection of the Property and identified ACBM including window caulk, pipe wrap, and roofing.

4.0 CLEANUP OBJECTIVES

The City of Sterling intends to pursue redevelopment of the Property in an effort to revitalize the City downtown and riverfront. Cleanup of the identified subsurface contamination and ACBM is a critical component to facilitate this redevelopment strategy. The objective of cleanup actions is to protect human health and the environment at the Property considering potential future mixed-use residential, commercial, and/or recreational end use.

The City of Sterling intends to enroll the Lawrence Brothers Hardware facility into the Illinois EPA voluntary Site Remediation Program (SRP) in pursuit of a No Further Remediation (NFR) letter relating to the identified subsurface impacts. Accordingly, the numerical cleanup objectives for subsurface contamination are the TACO remediation objectives for residential, industrial/commercial, and construction worker receptors. In addition, TACO regulations stipulate that soils remaining on-site cannot contain RCRA metals exceeding the toxicity characteristic threshold. Therefore, soils exhibiting the characteristic of toxicity based on TCLP analysis must be remediated as a primary cleanup objective.

5.0 CLEANUP ALTERNATIVES ANALYSIS - SUBSURFACE CONTAMINATION

There are four (4) cleanup alternatives that could be used to address the soil contamination at the Property.

5.1 Alternative 1 – No Action

The City does not address the subsurface contamination in any way at the site.

1. Effectiveness – this alternative does not address the contamination in any manner and, therefore, is not effective.
2. Implementability – implementing this alternative takes no effort on the part of the City but considering that soils are impacted with cadmium exceeding the toxicity characteristic threshold, the Property could not achieve regulatory closure without further action.
3. Cost – there is no direct cost for inactivity.

5.2 Alternative 2 – Limited Soil Excavation and Engineered Barrier Placement

Conduct pre-remedial design confirmation sampling to identify the horizontal and vertical extent of cadmium in soil exceeding the toxicity characteristic threshold. Based on the results, excavate soils impacted above RCRA thresholds and dispose off-site at a permitted Subtitle C landfill or treatment facility. Following excavation activities, backfill the excavation area with clean backfill materials and replace the engineered barrier where the slab was removed. Rely on the existing building slab as an engineered barrier for the remainder of soil impacts, and complete further evaluation and/or modeling for potential groundwater and/or surface water impacts.

1. Effectiveness – This alternative can be immediately effective at removing soils exceeding the toxicity characteristic threshold for cadmium. The engineered barrier effectively excludes soil ingestion and soil inhalation exposure routes.
2. Implementability – Excavation would require removal of a portion of the concrete slab overlying impacted soils and may not be feasible unless the building has been demolished, given the low-clearance ceilings. Excavation would also be complicated by the proximity of impacted materials to the Rock River and may undermine the integrity of the existing seawall. Requires that the City file under RCRA Subtitle C as a hazardous waste generator for the Property. In addition, excavation activities will likely require management of water due to the shallow water table.

3. Cost – The cost to excavate and dispose of characteristically hazardous cadmium-containing soils and replace the engineered barrier in the excavation area* is estimated as follows:

Excavation - Hazardous Soils	$ 130,000.00
Engineered Barrier	$ 20,000.00
Professional/Technical Services	$ 40,000.00
Sampling	$ 20,000.00
TOTAL	**$ 210,000.00**

**Costs exclude building demolition, if required.*

5.3 Alternative 3 – In Situ Chemical Stabilization and Reliance on Existing Floor as Engineered Barrier

Conduct pre-remedial design confirmation sampling to further refine the horizontal and vertical extent of cadmium in soil exceeding the toxicity characteristic threshold and collect volume of impacted soils for bench-scale treatability testing. Based on the results, conduct in situ chemical stabilization via injections of a liquid reagent to reduce leachable cadmium and render non-hazardous. Following injection activities, complete further confirmation soil sampling to verify cadmium concentrations are below to the toxicity characteristic threshold. Rely on the existing building slab as an engineered barrier for the remaining soil impacts.

1. Effectiveness – This alternative is anticipated to be effective at stabilizing cadmium in soil such that the toxicity characteristic threshold is no longer exceeded. The engineered barrier effectively excludes soil ingestion and soil inhalation exposure routes.
2. Implementability – Specialized injection equipment may be required due to low-clearance ceilings; however, the building and existing slab could remain in place. Effectiveness must be demonstrated by confirmation sampling results and may require multiple injection events. The engineered barrier (building slab) is existing and would not require further action apart from patching after injection work and routine maintenance.
3. Cost – The cost to conduct in situ cadmium stabilization is estimated as follows:

In Situ Injections	$ 90,000.00
Professional/Technical Services	$ 50,000.00
Sampling	$ 36,000.00
TOTAL	**$ 176,000.00**

5.4 Alternative 4 – Excavation and Disposal of all Soils Exceeding Tier 1 ROs

Conduct pre-remedial design confirmation sampling to further refine the horizontal and vertical extent of cadmium in soil exceeding the toxicity characteristic threshold. Based on the results, excavate soils impacted above RCRA thresholds and dispose off-site at a permitted Subtitle C landfill or treatment facility. Excavate remaining soils impacted above Tier 1 remediation objectives and dispose off-site at a permitted Subtitle D landfill facility.

1. Effectiveness – Soil excavation is an effective corrective action used to remove soil contamination. This alternative is effective without relying on engineered barriers to exclude exposure routes.

2. Implementability – Excavation would require removal of the concrete slab overlying impacted soils and would not be feasible unless the building has been demolished. Excavation would also be complicated by the proximity of impacted materials to the Rock River and may undermine the integrity of the existing seawall. Requires that the City file under RCRA Subtitle C as a hazardous waste generator for the Property. In addition, excavation activities will likely require management of water due to the shallow water table. Sampling will include analysis of all COCs in a confirmation sampling grid of sufficient density for Illinois EPA approval. Confirmation sample results exhibiting concentrations of COCs above Tier 1 ROs will require further excavation and additional confirmation sampling.

3. Cost – The cost to excavate and dispose of all soils exceeding Tier 1 ROs* is estimated as follows:

Excavation - Hazardous Soils	$ 130,000.00
Excavation - Non-Hazardous Soils	$ 350,000.00
Professional/Technical Services	$ 70,000.00
Sampling	$ 60,000.00
TOTAL	**$ 610,000.00**

**Costs exclude building demolition, if required.*

6.0 CLEANUP ALTERNATIVES ANALYSIS - ASBESTOS

There are three (3) cleanup alternatives that could be used to address the asbestos-containing building materials at the Property.

6.1 Alternative 1 – No Action

The City does not address the ABCM in any way at the site.

1. Effectiveness – this alternative does not address the contamination in any manner and, therefore, is not effective.
2. Implementability – implementing this alternative takes no effort on the part of the City. However, the Property cannot be redeveloped without addressing the ACBM.
3. Cost – there is no direct cost for inactivity.

6.2 Alternative 2 - Asbestos Encapsulation

ACBM can be encapsulated and managed in the Property building, assuming that the ACBM are in good condition.

1. Effectiveness – this alternative can be very effective for ACBM that are in good condition. However, given the age of the structure and duration of vacancy, the interior is not in good condition. Renovation will be extensive and will likely require removal of features with ACBM, disturbing any encapsulated materials and rendering this alternative ineffective.
2. Implementability – the implementability of this alternative is limited because the ACBM is generally in poor condition and the building interior would need to be completely remodeled.
3. Cost – the cost to encapsulate the ACBM is projected to be **$10,000 to $30,000.**

6.3 Alternative 3 – Asbestos Abatement

ACBM can be abated by a licensed asbestos abatement contractor.

1. Effectiveness – this alternative removes ACBM from the structure and thereby eliminates potential exposure to asbestos. Abatement is the most effective method of addressing ACBM on the Property.

2. Implementability – abatement must follow National Emission Standards for Hazardous Air Pollution (NESHAP) and Illinois Department of Public Health (IDPH) requirements. The building is structurally sound, making asbestos abatement easily implemented.

3. Cost – the cost to abate the asbestos is projected to be **$20,000 to $40,000.**

7.0 RECOMMENDATION

Based on the analysis presented in the previous section, the following recommendations are provided relative to cleanup of subsurface contamination and ACBM at the Property:

Subsurface Contamination: Alternative 3 - In Situ Chemical Stabilization and Reliance on Existing Floor as Engineered Barrier

This cleanup alternative is the most cost-effective approach for addressing the identified subsurface impacts and is anticipated to cause minimal disturbance to the land, river, and surrounding area. Given that the expected redevelopment includes renovation of the existing building, alternatives requiring building demolition (i.e. excavation) are not favorable for the overall project objectives. Alternative 3 is compatible with intended land use and meets the cleanup objectives for the Property in accordance with TACO.

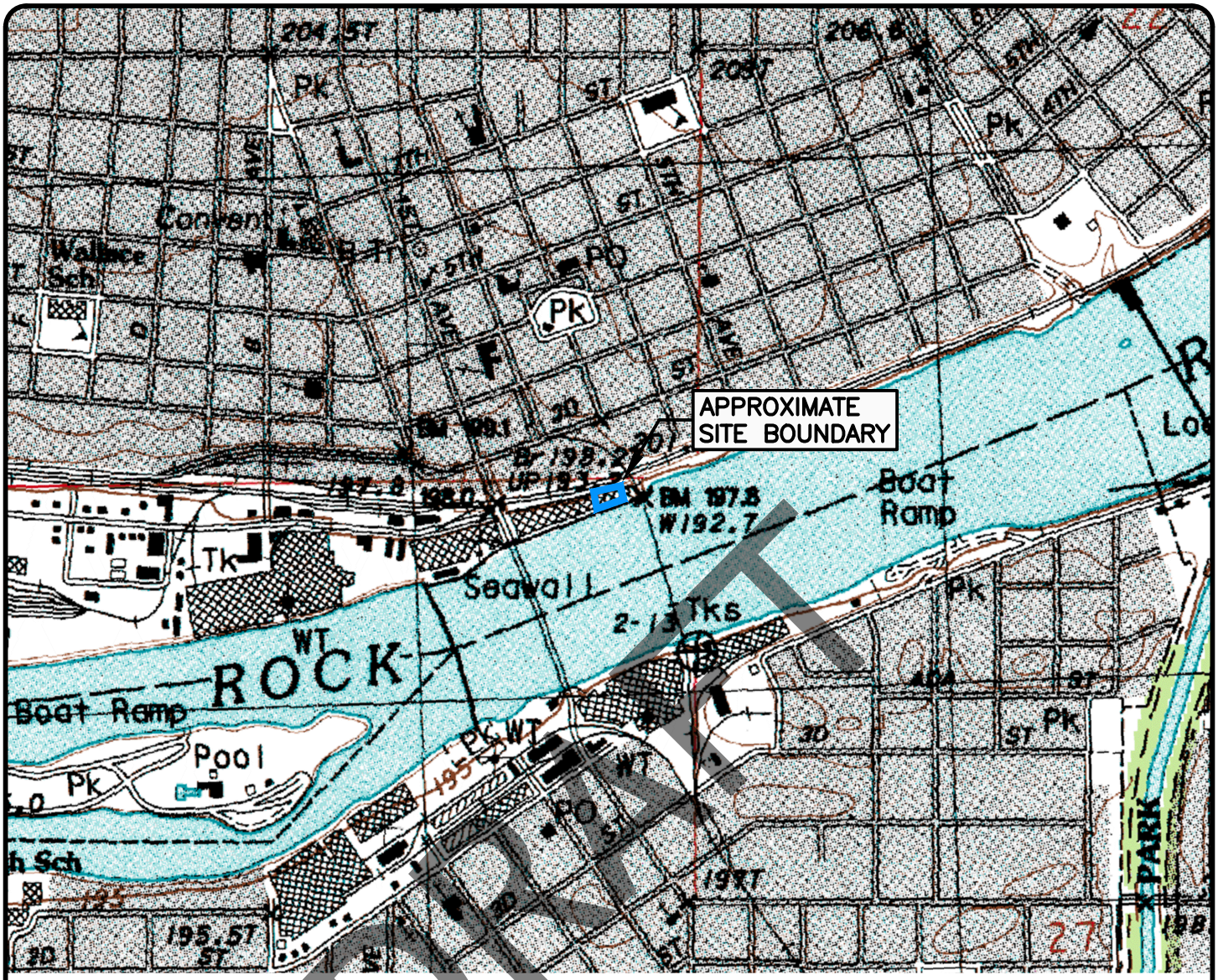
ACBM: Alternative 3 - Asbestos Abatement

Abatement of ACBM is the only effective and implementable option to prevent potential asbestos exposure during and after redevelopment of the Property due to the condition of the ACBM, negating the option for encapsulation.

Figures

Figure1

Site Location Map



N
W E
S

2000 0 2000

GRAPHIC SCALE IN FEET

FIGURE 1

SITE LOCATION
LAWRENCE BROTHERS
2 FIRST AVE.
STERLING, IL 61081

11/6/19

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL

ILLINOIS
IOWA
WISCONSIN

PLOT DATE: 11/6/19

Figure 2

Site Layout Map

N
W E
S

60 0 60
GRAPHIC SCALE IN FEET

FIGURE 2
SITE LAYOUT MAP
LAWRENCE BROTHERS
2 FIRST AVE.
STERLING, IL 61081

11/6/19

FEHR GRAHAM
ENGINEERING & ENVIRONMENTAL
ILLINOIS DESIGN FIRM NO. 194-003525

ILLINOIS
IOWA
WISCONSIN

G:\C3D\19\19-075\Exhibits\19-075_BASE MAP.dwg, SITE LAYOUT
PLOT DATE: 11/6/19

No. _____

Certificate of Publication

State of Illinois SS.

Whiteside County

This is to Certify that a notice, a true copy of which is hereto attached, was published in the Daily Gazette, a secular newspaper of general circulation published daily in the City of Sterling, in the County of Whiteside and State of Illinois, by SAUK VALLEY NEWSPAPERS, a corporation existing under the laws of said State, once each week for 1 successive week(s); that the date of the first paper containing said notice was the 14th day of November, 2019, and that the date of the last paper containing said notice was the 14th day of November, 2019

And this is to further certify that said newspaper have been regularly published for one year prior to the first publication of said notice therein, and that the person who signs the name of said company to this certificate is as appears by the records of said company, it is duly authorized agent for such purpose

Dated at Sterling, in said county, This 14th day of November, 2019

Daily Gazette

Publication Fee $95.55

by: Carla Wahler
Authorized Agent

Received payment
Daily Gazette

by:_____

EPA Brownfields Cleanup Grant Proposal
City of Sterling, Illinois

The City of Sterling is applying for a Brownfield Cleanup Grant from the United States Environmental Protection Agency for activities associated with the remediation of the former Lawrence Brothers Building, located at 2 First Avenue, Sterling, Illinois.

As part of the application process, the City of Sterling is required to obtain public input to their proposal, which is due to EPA on December 3, 2019. Starting November 18, 2019, a draft proposal and the draft Analysis of Brownfield Cleanup and Alternatives (ABCA) for the site will be available for public review with the City Clerk at the City of Sterling City Hall, 212 Third Avenue, Sterling, Illinois 61081. The draft documents will also be available on the City's website (sterling-il.gov).

The City of Sterling will also discuss the draft proposal and draft ABCA, as well as accept and consider public comments at a Public Meeting on November 18, 2019 at 6:30 pm in the Coliseum Building, 212 Third Avenue, Sterling, Illinois 61081. If you need accessibility or language accommodations for the Public Meeting, please contact Marie Rombouts at 815-632-6630.

The City of Sterling will consider and respond to and/or incorporate all substantial written comments received by November 30, 2019. Written comments should be directed by email to Marie Rombouts at mrombouts@sterling-il.gov or by US Mail to Marie Rombouts,
City Clerk, City of Sterling, 212 Third Avenue,
Sterling, Illinois 61081.

November 14, 2019

CITY OF
STERLING
ILLINOIS

CITY OF STERLING'S
US EPA BROWNFIELDS CLEANUP GRANT APPLICATION DRAFT
AND DRAFT ANALYSIS OF BROWNFIELDS CLEANUP ALTERNATIVES (ABCA)

The City of Sterling did not receive any comments from the Public on their DRAFT Application or DRAFT Analysis of Brownfields Cleanup Alternatives (ABCA).

CITY OF
STERLING
ILLINOIS

PUBLIC MEETING REGARDING CITY'S
US EPA BROWNFIELDS CLEANUP GRANT APPLICATION:
City of Sterling, Illinois

November 18, 2019
6:30pm

A Draft of the City's US EPA Cleanup Grant Application and the associated Analysis of Brownfields Corrective Action (ABCA) was presented to public.

Hard copies of both documents were available during the public meeting for those that did not have access to the City Website.

An overview of the Phase II Environmental Site Assessment and the findings from the Assessment were presented. The proposed cleanup plan was also presented. There was a focused discussion on the area of cadmium and it's impacts. Asbestos containing building materials (ACBM) present on the site were also presented.

No questions or comments were received during the Public Meeting.

The City of Sterling unanimously passed the **Resolution #R2019-11-28 Authorizing Application to United States Environmental Protection Agency Brownfields Cleanup Grant Program (FY2020)** on November 18th during the regular City Council Meeting. This Resolution also provides authorization of the 20% Cost Share that must be provided by the City.

CITY OF
STERLING
ILLINOIS

Industrious. Inspired. Innovative.

BROWNSFIELD GRANT APPLICATION HEARING

NOVEMBER 18, 2019 – 6:30 P.M.

SIGN-IN SHEET

NAME – (PLEASE PRINT)

Maureen Frankfother
Ron Eggenier
Gary M Lisi
Joan Rosengren
Cindy Von Holten
Gabriel J. Perez
Shirley M Sharp
Roy K. Sharp, Jr
margarita Swan
Cindy Williams
Linda Kuhns
Sarah Kuhns
Kris Noble
Anna Gronharing
[signature]
[signature]
[signature]
Lucas Sotelo
Gary Cook

CITY OF STERLING ILLINOIS

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BROWNSFIELD GRANT APPLICATION HEARING

NOVEMBER 18, 2019 – 6:30 P.M.

SIGN-IN SHEET

NAME – (PLEASE PRINT)

Amanda Schmidt

Taylor Brownlee

Solene Cork

Kale Corl

City of Sterling
212 Third Avenue
Sterling, IL 61081

815/632-6630
City Clerk's Office

CERTIFICATE

STATE OF ILLINOIS)
County of Whiteside) ss.
CITY OF STERLING)

I, Marie Rombouts, City Clerk of the City of Sterling and ex-officio keeper of records and seal thereof, do hereby certify that the above and foregoing is a true and correct copy of **Resolution #R2019-11-28 Authorizing Application to United States Environmental Protection Agency Brownfields Cleanup Grant Program (FY2020)** as approved by the City Council on the 18th day of November, 2019, as the same appears from the records and files of my office.

In witness whereof I have hereunto set my hand and affixed the corporate seal of said City of Sterling, Illinois this 21st day of November, 2019.

Marie Rombouts

Marie Rombouts, City Clerk

RESOLUTION NO. R2019-11-28

RESOLUTION AUTHORIZING APPLICATION TO UNITED STATES ENVIRONMENTAL PROTECTION AGENCY BROWNFIELDS CLEANUP GRANT PROGRAM (FY2020)

WHEREAS, the City of Sterling is interested in applying to the United States Environmental Protection Agency (USEPA) for a grant to fund Brownfields Cleanup at the former Lawrence Brothers property, and

WHEREAS, USEPA's Brownfields Program empowers communities to work together to assess, safely clean up and sustainably reuse brownfields; and

WHEREAS, the USEPA Brownfields Program helps communities realize additional benefits, including stimulating private investment; creating new jobs; and contributing to increased property values; and

WHEREAS, a USEPA Brownfields Cleanup Grant would provide the City of Sterling with funding to remediate the former Lawrence Brothers Building 3 site; and

WHEREAS, it is necessary for the City of Sterling to complete and file a written application and then enter into a written agreement(s) with the USEPA.

NOW, THEREFORE, BE IT RESOLVED BY THE CITY COUNCIL OF STERLING, ILLINOIS as follows:

Section 1. The foregoing Recitals are not mere preparatory language, but are hereby incorporated in this Section 1 as if said Recitals were fully set forth. The City of Sterling intends to apply for a USEPA Brownfields Cleanup Grant for Hazardous Substances in the amount not to exceed $500,000.

Section 2. The City of Sterling is hereby eligible to apply for a USEPA Brownfields Cleanup Grant for the purposes as outlined above and under the terms and conditions as required by the United States Environmental Protection Agency and the State of Illinois and hereby agrees to the understandings and assurances contained in said application. This grant requires 20% matching funds.

Section 3. The Mayor is authorized to provide such additional information as may be required to accomplish the obtaining of such grant.

Section 4. The City Council authorizes the Mayor to sign and execute any and all documents necessary for the completion of said application, acceptance of such grant, and execution of grant agreements to fulfill the intent of this Resolution.

Section 5. The provisions of this Resolution are severable and if any court of competent jurisdiction shall declare any portion of this Resolution to be invalid or unenforceable, said decision shall not affect any portion of this Resolution, other than the part declared invalid or unenforceable. This City Council hereby declares that it would have enacted this Resolution even with the invalid or unenforceable portion deleted.

Section 6. This Resolution shall be in full force and effect from and after its passage and approval in the manner provided by law.

Section 7. That any resolution or motion in conflict with this Resolution is hereby repealed insofar as it conflicts with this Resolution.

RESOLVED BY THE CITY COUNCIL OF THE CITY OF STERLING, ILLINOIS, this 18th day of November, 2019.

Mayor

ATTEST:

Marie Rombouts
City Clerk

OMB Number: 4040-0004
Expiration Date: 12/31/2019

Application for Federal Assistance SF-424

* 1. Type of Submission:
- [ ] Preapplication
- [x] Application
- [ ] Changed/Corrected Application

* 2. Type of Application:
- [x] New
- [ ] Continuation
- [ ] Revision

* If Revision, select appropriate letter(s):

* Other (Specify):

* 3. Date Received: 12/03/2019

4. Applicant Identifier:

5a. Federal Entity Identifier:

5b. Federal Award Identifier:

State Use Only:

6. Date Received by State:

7. State Application Identifier:

8. APPLICANT INFORMATION:

* a. Legal Name: City of Sterling, Illiois

* b. Employer/Taxpayer Identification Number (EIN/TIN):

* c. Organizational DUNS: 0340634040000

d. Address:

* Street1: 212 Third Avenue

Street2:

* City: Sterling

County/Parish:

* State: IL: Illinois

Province:

* Country: USA: UNITED STATES

* Zip / Postal Code: 61081-0000

e. Organizational Unit:

Department Name:

Division Name:

f. Name and contact information of person to be contacted on matters involving this application:

Prefix: Mr.

* First Name: Scott

Middle Name:

* Last Name: Shumard

Suffix:

Title: City Manager

Organizational Affiliation:

* Telephone Number: 815-632-6621

Fax Number:

* Email: sshumard@sterling-il.gov

Application for Federal Assistance SF-424

*** 9. Type of Applicant 1: Select Applicant Type:**

C: City or Township Government

Type of Applicant 2: Select Applicant Type:

Type of Applicant 3: Select Applicant Type:

* Other (specify):

*** 10. Name of Federal Agency:**

Environmental Protection Agency

11. Catalog of Federal Domestic Assistance Number:

66.818

CFDA Title:

Brownfields Assessment and Cleanup Cooperative Agreements

*** 12. Funding Opportunity Number:**

EPA-OLEM-OBLR-19-07

* Title:

FY20 GUIDELINES FOR BROWNFIELD CLEANUP GRANTS

13. Competition Identification Number:

Title:

14. Areas Affected by Project (Cities, Counties, States, etc.):

Add Attachment | Delete Attachment | View Attachment

*** 15. Descriptive Title of Applicant's Project:**

City of Sterling, Illinois - FY2020 US EPA Cleanup Grant Application
$214,000 Total Federal Request (Hazardous Substances)
City will provide 20% Cost-Share of $42,800

Attach supporting documents as specified in agency instructions.

Add Attachments | Delete Attachments | View Attachments

Application for Federal Assistance SF-424

16. Congressional Districts Of:

* a. Applicant: IL-17 | * b. Program/Project: IL-17

Attach an additional list of Program/Project Congressional Districts if needed.

Add Attachment | Delete Attachment | View Attachment

17. Proposed Project:

* a. Start Date: 10/01/2020 | * b. End Date: 09/30/2023

18. Estimated Funding ($):

* a. Federal	214,000.00
* b. Applicant	42,800.00
* c. State	0.00
* d. Local	0.00
* e. Other	0.00
* f. Program Income	0.00
* g. TOTAL	256,800.00

*** 19. Is Application Subject to Review By State Under Executive Order 12372 Process?**

☐ a. This application was made available to the State under the Executive Order 12372 Process for review on .

☐ b. Program is subject to E.O. 12372 but has not been selected by the State for review.

☒ c. Program is not covered by E.O. 12372.

*** 20. Is the Applicant Delinquent On Any Federal Debt? (If "Yes," provide explanation in attachment.)**

☐ Yes ☒ No

If "Yes", provide explanation and attach

Add Attachment | Delete Attachment | View Attachment

21. *By signing this application, I certify (1) to the statements contained in the list of certifications and (2) that the statements herein are true, complete and accurate to the best of my knowledge. I also provide the required assurances** and agree to comply with any resulting terms if I accept an award. I am aware that any false, fictitious, or fraudulent statements or claims may subject me to criminal, civil, or administrative penalties. (U.S. Code, Title 218, Section 1001)**

☒ ** I AGREE

** The list of certifications and assurances, or an internet site where you may obtain this list, is contained in the announcement or agency specific instructions.

Authorized Representative:

Prefix: Mr. | * First Name: Charles

Middle Name:

* Last Name: Lee

Suffix:

* Title: Mayor

* Telephone Number: 815-632-6621 | Fax Number:

* Email: slee@sterling-il.gov

* Signature of Authorized Representative: Cindy Von Holten | * Date Signed: 12/03/2019